

**What Is Claimed Is:**

- 1           1.    A quality assurance system, comprising:  
2           a service provider having at least a first process stage,  
3           to perform a process on goods at the first process  
4           stage, transfer engineering data corresponding to  
5           the process, and hold the goods at the first process  
6           stage; and  
7           a control center coupled to the service provider via  
8           Internet to receive the engineering data, compare the  
9           engineering data with a standard specification for  
10          confirming quality of the goods, and transfer a  
11          confirmation message to the service provider if the  
12          engineering data conforms to the standard  
13          specification,  
14          such that the service provider releases the goods for  
15          further operations after the confirmation message is  
16          received.
- 1           2.    The system as in claim 1 wherein the control center  
2           further transfers a fail message to the service provider if the  
3           engineering data does not conform to the standard specification.
- 1           3.    The system as in claim 2 wherein the service provider  
2           further performs a recovery measure on the goods if the fail  
3           message is received.
- 1           4.    The system as in claim 1 wherein the engineering data  
2           comprises identity of the goods, stage name of the first process  
3           stage, and process information of the process at the first  
4           process stage.

1           5.    The system as in claim 4 wherein the process  
2   information comprises a recipe used in the first process stage.

1           6.    A quality assurance method for use between a service  
2   provider and a control center, comprising the steps of:  
3           performing of a process on goods at a first process stage  
4                by the service provider;  
5           transferring of engineering data corresponding to the  
6                process to the control center via Internet, and  
7                holding of the goods at the first process stage by  
8                the service provider;  
9           comparison of the engineering data with a standard  
10               specification for confirming quality of the goods by  
11               the control center;  
12           transferring of a confirmation message to the service  
13               provider via the Internet by the control center if  
14               the engineering data conforms to the standard  
15               specification; and  
16           release of the goods for further operations by the service  
17               provider after the confirmation message is received.

1           7.    The method as in claim 6 further comprising  
2   transferring of a fail message to the service provider by the  
3   control center if the engineering data does not conform to the  
4   standard specification.

1           8.    The method as in claim 7 further comprising performing  
2   of a recovery measure on the goods by the service provider if  
3   the fail message is received.

1           9.     The method as in claim 6 wherein the engineering data  
2 comprises identity of the goods, stage name of the first process  
3 stage, and process information of the process at the first  
4 process stage.

1           10.    The method as in claim 9 wherein the process  
2 information comprises a recipe used in the first process stage.

1           11.    A quality assurance system, comprising:

2           a service provider having a sequence of process stages and  
3           a quality assurance stage, to perform a plurality of  
4           processes on goods at the process stages, transfer  
5           engineering data corresponding to the processes, and  
6           hold the goods at the quality assurance; and

7           a control center coupled to the service provider via  
8           Internet to receive the engineering data, compare the  
9           engineering data with a standard specification, and  
10          transfer a confirmation message to the service  
11          provider if the engineering data conforms to the  
12          standard specification,

13          such that the service provider ships the goods after the  
14          confirmation message is received.

1           12.    The system as in claim 11 wherein the control center  
2 further transfers a fail message to the service provider if the  
3 engineering data does not conform to the standard specification.

1           13.    The system as in claim 12 wherein the service provider  
2 further performs a recovery measure on the goods if the fail  
3 message is received.

1           14. The system as in claim 11 wherein the engineering data  
2 comprises identity of the goods, stage name of each process  
3 stage, and process information of each process at respective  
4 process stages.

1           15. The system as in claim 14 wherein the process  
2 information comprises a recipe used in each process stage.

1           16. A quality assurance method for use between a service  
2 provider and a control center, in which the service provider has  
3 a sequence of process stages and a quality assurance stage,  
4 comprising the steps of:

5           performing of a plurality of processes on goods at the  
6           process stages by the service provider;

7           transferring of engineering data corresponding to the  
8           processes to the control center via Internet, and

9           holding of the goods at the quality assurance stage  
10          by the service provider;

11          comparison of the engineering data with a standard  
12          specification by the control center;

13          transferring of a confirmation message to the service  
14          provider via the Internet by the control center if  
15          the engineering data conforms to the standard  
16          specification; and

17          shipping of the goods by the service provider after the  
18          confirmation message is received.

1           17. The method as in claim 16 further comprising  
2 transferring of a fail message to the service provider by the

3 control center if the engineering data does not conform to the  
4 standard specification.

1 18. The method as in claim 17 further comprising  
2 performing of a recovery measure on the goods by the service  
3 provider if the fail message is received.

1 19. The method as in claim 16 wherein the engineering data  
2 comprises identity of the goods, stage name of each process  
3 stage, and process information of each process at respective  
4 process stages.

1 20. The method as in claim 19 wherein the process  
2 information comprises a recipe used in each process stage.

1 21. A quality assurance system, comprising:

2 a contractor having a sequence of process stages and a  
3 quality assurance stage, to perform a plurality of  
4 test processes on at least one wafer at the process  
5 stages, transfer engineering data corresponding to  
6 the processes, and hold the wafer at the quality  
7 assurance; and

8 an IC (integrated circuit) foundry coupled to the service  
9 provider via Internet to receive the engineering  
10 data, compare the engineering data with a standard  
11 specification, and transfer a confirmation message  
12 to the contractor if the engineering data conforms  
13 to the standard specification,

14 such that the contractor ships the wafer after the  
15 confirmation message is received.

1           22. The system as in claim 21 wherein the IC foundry  
2 further transfers a fail message to the contractor if the  
3 engineering data does not conform to the standard specification.

1           23. The system as in claim 22 wherein the contractor  
2 further performs a recovery measure on the wafer if the fail  
3 message is received.

1           24. The system as in claim 21 wherein the engineering data  
2 comprises identity of the wafer, stage name of each process  
3 stage, and process information of each process at respective  
4 process stages.

1           25. The system as in claim 24 wherein the process  
2 information comprises a test program used in each process stage.

1           26. The system as in claim 21 wherein the test processes  
2 are circuit probe tests.

1           27. A quality assurance method for use between a  
2 contractor and an IC (integrated circuit) foundry, in which the  
3 contractor has a sequence of process stages and a quality  
4 assurance stage, comprising the steps of:

5           performing of a plurality of test processes on at least one

6           wafer at the process stages by the contractor;

7           transferring of engineering data corresponding to the

8           processes to the IC foundry via Internet, and holding

9           of the wafer at the quality assurance stage by the

10          contractor;

11          comparison of the engineering data with a standard

12          specification by the IC foundry;

13           transferring of a confirmation message to the contractor  
14               via the Internet by the IC foundry if the engineering  
15               data conforms to the standard specification; and  
16           shipping of the wafer by the contractor after the  
17               confirmation message is received.

1           28. The method as in claim 27 further comprising  
2   transferring of a fail message to the contractor by the IC  
3   foundry if the engineering data does not conform to the standard  
4   specification.

1           29. The method as in claim 28 further comprising  
2   performing of a recovery measure on the wafer by the contractor  
3   if the fail message is received.

1           30. The method as in claim 27 wherein the engineering data  
2   comprises identity of the wafer, stage name of each process  
3   stage, and process information of each process at respective  
4   process stages.

1           31. The method as in claim 30 wherein the process  
2   information comprises a test program used in each process stage.

1           32. The method as in claim 27 wherein the test processes  
2   are circuit probe tests.